Ix Métraux--280 8-5 (1909) 1600 SF10 Chiriguano SF10
Chané SF8
Guarayu SF11

/430/

Chapter IX

Basketry and Its Techniques

1. General Considerations

Basketry is far from being as abundantly represented among the Chiriguano and the Chané as among the Indian tribes of the Amazon basin or the Guianas. The secondary role it plays in their industry is due to the nature of the soil where they live and the climate they enjoy. Palm trees with pinnate leaves are lacking, to my knowledge at least, over the whole extent of their territory; as for the ones whose leaves open like fans, if they are numerous in certain places, their occurrence is far from being uniform. The palms which the Chiriguano Indians call karandaí (Copernicia australis) form veritable groves here and there, whereas over vast regions they are lacking or appear only sparsely. I saw a considerable number of them between San Luis and the Saladito River, and I have crossed some large palm groves between Yacuiba and Villamontes, on the Pilcomayo, and south of the Parapití River, going from Cuevo to Pipi. I noted, moreover, that the distribution of the karandaí coincided with that of a certain type of basketry (twilled work /named in English/), for which the Indians use these leaves.

Fig. 97. Back basket used by the Guarayú Indians for transporting heavy loads (from Nordenskiöld).

Nordenskiöld (10, p. 169) recounts an anecdote which illustrates well the influence the environment exerts on this industry. At the time of one of his trips into the Chaco, the scholar was accompanied by several Guarayú Indians, who followed him as far as Chiriguano country. The Guarayú customarily load their baggage and the products of their fields into back baskets of a special type (see Fig. 97) which have a wide distribution in tropical America, from the Guianas to Paraguay (Nordenskiöld 11, p. 171 and MAP 21).

2:Métraux E-5 (1929) 1948 SF10 Chiriguano SF10
Chane SF8

The migrations, wars, and the religious conversion of the *Chiriguano* have been the subjects of many historical monographs. The most important of these are by Corrado (1884), Serrano y Sanz (1898), Domingues (1918), Gamón (1929 a, and b), Métraux (1930 b), Coni (1925), Moreno (1929), and Finot (1939). The Jesuit missionary work among the *Chiriguano* has been described by Lozano (1941) and Muriel (1918).

CULTURE

SUBSISTENCE ACTIVITIES

As today *Chiriguano* and *Chané* share in the same culture, the following data may apply to both tribes.

Farming.—The *Chané*, conquered by the *Chiriguano*, were proficient farmers who, though practicing a tropical type of agriculture, were probably acquainted with many of the methods of cultivation of the Andean area. The *Chiriguano* adopted their traditions. The new habitat of the *Chiriguano* did not offer the same resources for hunting and fishing as had their homeland. Therefore, these Indians depend on farming to a larger extent than any other *Tupi-Guarani tribe*. The basis of their livelihood is maize, of which they have 11 varieties, all related to those of Paraguay. Then follow in order of importance: Pumpkins, beans (11 varieties), sweet potatoes, sweet manioc, peanuts, and some Barbary figs (*Opuntia* sp). Sweet potatoes were grown on a large scale by the *Chané* of the Parapeti River.

These Indians also raise cotton, tobacco, urucú, and, in the Parapeti region, reeds for arrow shafts (*Arundo donax*). Plants of the Old World adopted by the *Chiriguano* include melons, watermelons, oranges, sugarcane, and sorghum.

Chiriguano men clear the fields and surround them with a tall fence as a protection against the inroads of wild or domesticated animals, a task which is considered to be particularly strenuous. They also till the soil, but at harvest time they are assisted by the women and children. The latter, armed with slings, drive away the parakeets and other birds which prey on the crops. Nordenskiöld (1912, p. 183) observed that among the *Chané* of the Itiyuro region, large maize fields were tended by men while pumpkins and beans were raised by the women.

Collecting wild food.—When their crops fail, the *Chiriguano* subsist on the same species of pods and fruits as those collected by the Chaco Indians: Algarrobo, tuna, mistol, caraguatá, and other plant foods.

Hunting.—Hunting is a very secondary economic activity, at least in modern times. Peccaries, which are the main game animal, are hunted with specially trained dogs and killed with bows and arrows or with clubs. Rheas, which are abundant in the Chaco plains, are caught with bolas. Pigeons are captured with clap nets. Special arrows with two points are used for hunting yacu birds (*Penelope* sp.).

/14 cont./

311 312 241 The closer the traveler gets to the Gran Chaco, the less water and the less fertility he finds; the very fields of Yvu are patent proof, for crops are rarely abundant there. When the rains are torrential in other sections, they are sparse in Yvu; the farther to the west one travels from Aguaragüe, the more fertile is the land, because the hills and hillocks are more frequent and higher, water more abundant, and consequently the land more moist, which is necessary for agricultural production.

The fields are suitable for raising cows and horses, for the multiplication of sheep and pigs; the year when it fails to rain, however, there is lack of food for the livestock, as well as lack of water, the suffering is great, and numbers die near the waters which are found at some distance from the spots where there is feed, such as the slopes of the hills and the tops of the hillocks, abounding in tree leaves.

• 137 The countryside is clothed with grasses in the summer, but the region begins to turn beautiful in the spring and even earlier. The vigorous woods, dry and leafless during the cold months, begin to dress in verdant foliage at the beginning of the month of September, and in a few days nature is rejuvenated. Then it is very lovely to contemplate from some slight rise a broad pampa where there are carob trees, groves of catalpas or lapachos, the first green, the second red, and the third yellow and purple.

241 182 [132] [433] The territory is productive only in the rainy season, because the Chiriguano in general will not take the trouble to put in a good irrigation ditch when he can; he waits for it all from the high heavens. Miracles could have been worked on the banks of the rivers in times past; today it is difficult because they are very few and, like their grandparents, are satisfied with maize, a little sugar cane, and other delicacies, like sweet potatoes or batatas, mandioca, and peanuts.

241 [221] Large-scale planting begins at the end of November or the beginning of December, after the country has been watered by two or three abundant rains. The maize grows very high and, when there is no lack of water, produces two or three ears on each stalk. The frijoles produce three crops. The sugar cane

/15 cont./

433 241 sweet potatoes; cotton grows everywhere, tomatoes and garlic mature the year round, and in the gardens lettuce, cabbage, cauliflower, and peppers create the beauty of a spot, without taking into account the gastronomic advantages. Even the peach trees would yield fine fruits, but they suffer much from the black butterflies, which damage them before they ripen.

Without work the land will produce only briars and brambles, and /16/ as long as there are only Chiriguano and [157] [18] [185] cattle ranches here, progress will be slight and the population sparse, because the Indian has no ambition, and life is relatively inexpensive; the whites prosper by taking good care of their livestock, and no greater fertility can be obtained from the land because the holdings of a few families are very extensive and do not facilitate the residence of numerous renters, who do not always give good results nor do all come or ask to rent for farming alone. All of them want to get rich easily and quickly, and the best way is to raise stock, the result of which is that great areas of briars and brambles exist.

Flora

13 In the course of this hasty description I have noted that in Chiriguano country atmospheric changes are very sudden, but it has been noted that the region is quite fertile when it is watered by the rains or by irrigation ditches, because small rivers are plentiful, particularly in the mountainous region, and an occasional river of some size bathes the adjacent territories with its abundant waters.

There are many hills, pampas, and valleys, and for this reason every kind of climate may be found in this territory. [137] There are in fact oppressive heat, intense cold, and a temperate climate, thus making it possible to find land for every product from the lowly gourd to the savory chirimoya, from the ubiquitous maize to wheat, rice, and barley, from the mulberry /mora/, which grows spontaneously, to the rich grape, whose bunches reach weights of three and four libras.

824 /16 cont./
139
[114] I am going to make a brief list of some trees and plants which I know, without pretending to be a botanist, a subject I have not studied. I shall only say that I have learned it through experience and careful reading; when describing certain plants, I shall also make note of the use made of the bark, root, leaves, and branches of some.

ACACIA BALSAMICA. -- This is the quina-quina, under which name it is known here in Chiriguano country, a tall, straight tree, whose wood is ideal for building because the wood borer does not damage it; it is much used here in the construction of upper roofs, especially for the braches or trusses on which the roof frame is to rest. It is plentiful in Cordillera Province and even in Acero Province.

/17/ ACACIA SAPONARIA. -- This tree is large and its
[342] wood light, perhaps even lighter than cedar, but it is of less
[492] value; it is whitish and much used for making doors and windows, but the main use to which said wood is put is in saddleries to
[296] make pads for saddles. The seeds are similar to monkey ears
[515] and are good for washing clothes and to keep the skin of the face free of blemishes; here it is known by the name "timboy."

ACACIA AMARILLA /A. moniliformi/. -- It is a medium-sized tree of rather lightweight hardwood, for which reason drawers or wash basins and yokes for oxen are made with it.
[372] It is no good for making fire, because it smells when it burns from which it gets the Chiriguano name "Tatane," fire that smells; the wood is yellow.

ACACIA ASTRINGENTE. -- There are many groves of
[342] trees of this class here and there; it is the most abundant tree,
[281] the wood is good for small joists because the wood borer does not eat it; the bark contains much tannin, and it is the wood most used for tanning hides by both Indians and whites; the latter call it sebil and the former "Curupau."

245 ACHIOTE. BIXA ORELLANA. -- This is cultivated in
137 fields and gardens, grows to a height of two and a half meters.
324 its leaves are dark green; it produces abundant fruit in a sort of pod covered with bristles and filled inside with fiery red seeds, which are what makes the little tree highly valued. They
[302] serve as food coloring, and the Chiriguano paint their faces
[303]
[439]

245 /17 cont./
137 and feet with them, as will be seen; for this last purpose it is
824 prepared beforehand, many pods being boiled in an olla, and
[302] pastes of every size are made from the decoction, depending
[303] on the value that they wish them to have; it is traded by
[439] Chiriguanos and whites.

137 The Bixa orellana, or "Urucu," as the Indians call it, is
824 a plant of high value for the Chiriguano; he will travel far to obtain a small amount in the towns or places where it is prepared.

ALGARROBO. -- The place where this extraordinarily large tree abounds is in the pampas; thus in the plain of "Curuyuqui" of Yvu Mbaion, Isoso, Parapiti, and the Gran Chaco it is found forming forests. It is very bulky and has
[342] long branches which on some touch the ground; its trunk is
[445] thick and not always erect, the wood is excellent, similar to oak in spite of being dark, and it is much used for making tuns, door and window casings, and even for barrels. In
[262] Chiriguano this tree is called /18/ "Ivopei," and the "Ivope"
[293] pod is long, compressed, and yellow; when it is ripe, it is sweet and much sought after by livestock and by the Chiriguano; it is their food and drink in times of scarcity as well as other times, and the mead that they make is extremely intoxicating. On the bank of the Pilcomayo even the whites eat this pod; the Toba, Choroti, Mataco, and others hold their orgies when the algarrobo ripens.

ALGARROBO CHICO. -- This is a smaller tree than the previous one, even its fruit is smaller, speckled in color, and sweeter than the true algarrobo, but not as abundant as the
[262] first. As the pods are small and the seeds within abundant, it is not highly thought of among the Chiriguano; they only eat it out of necessity or as a tidbit; the wood is not valued very highly because undoubtedly there are others that are better. In Chiriguano it is called "Ivope rai."

ALGARROBO AGRIO. -- This is also small, and it is called
[262] "sour" because the flavor of the pods really is sour. In times of scarcity it is also food for the Chiriguano; the pods are small, and the tree has its congenial sites. The Chiriguano Indians call it "Ivopetayi."

/18 cont./

•137 824 ALGARROBO NEGRO. -- Among the Indians this is called "Ivopene," and the whites call it tusca; it multiplies and grows very fast. Sometimes 20 or 30 newly sprouted plants can be counted around a single cake of cow dung, which indicates that the cattle eat it in abundance, and where it does not already exist they sow it with their bowels. [262] It grows to a height of some three meters and is very thorny, which makes it difficult to travel through places where it is abundant; when there is no other food it is one of the Chiriguano's resources.

[322] ALGAROBILLA. -- The wood of this plant, which the Chiriguano call "Igüirayepiro," is black and very good for cabinetmakers; it is a species of ebony and is strong. Implements of war and those for fiestas of the tribes are made of this wood; its trunk is twisted, and it rarely has a single trunk; the flowers are yellow and the berries much sought after, by goats, but it makes them abort.

ALGODONERO /cottonwood/. -- This is a leafy tree with many branches; it grows to a height of two meters, has yellow flowers and a white boll when it is ripe, which is then picked, dried in the sun, the material pulled away from the seeds and cleaned. The "mandiyu" cotton is very useful; hammocks, ponchos, saddlebags, and sacks are made with it; it would even be easy to manufacture macana, but this is not done because what comes from outside is very cheap and /19/ [157] shower, even though it is not as strong as the other. Its leaves used as a poultice are anticancerous, and its seeds in the form of a pomade work against herpes and skin eruptions; oil for lighting can be extracted from the seed.

ANONA. -- The annona is a bush which grows to barely one meter; it has congenial places, the pampas, which have soil mixed with sand. In the said pampas it thrives in abundance, but it is even found in other places. The ripe fruit is red and like the pineapple in shape, but the pulp and seeds are like the chirimoya, as is the flavor of the pulp. Before it ripens, even the skin is very similar to that of the chirimoya. The Chiriguano call it "Aratiru."

ASPIDOSPERMO BLANCO. -- This tree is of great size and it is abundant almost everywhere; the wood is white and good

/19 cont./

137 824 [159] in dry places; when dampness penetrates it, it is destroyed in a few years, as experience has shown. The bark that is found under the first layer is split, washed in tepid water, and left to steep overnight; it cures intermittent fever. The Argentinians call it cacha, the whites quebracho, and the Chiriguano "Igũiraro."

[162] AZUFAIFO /jujube tree/. -- This is abundant hereabouts and is a tree of medium size. Its wood is not valued very highly, but the fruit, the size of a grape seed and of a dark coffee color, is a great resource in times of scarcity for the poor Chiriguano. It ripens in January and February and is liked even by cattle and by sheep and pigs. The whites call it mistol and the Chiriguano "Yuá."

245 BANANA TREE. -- Cultivated in orchards and well fenced-in fields, it forms a grove, and each plant yields or produces a cluster, very large on some of them. When the ripe cluster is removed, the plant that produced it must be cut in order that the others may produce their own. There are several [162] varieties, large and small, the latter very sweet and eaten as fruit, and the former only when boiled and roasted; the whites call them plátano, and the Chiriguano "Pacoba."

137 824 [171] BIGONIA ACUOSA. -- This is a tiny little bush one vara in height, which under the ground has a large root like a watermelon and even larger; it contains much pulp which, when squeezed, yields potable water and is used for it in times of scarcity. The Chiriguano call it "Sipoi."

[142] CATALPA. -- This is a large tree and fairly strong. Its wood is used in the construction of houses. The color of the /20/ wood is dark, but when it is newly cut it is somewhat [115] green. Its flowers are purple, and the Chiriguano chew them to whiten their teeth; they are bitter and because of this the tree is called "Tayi," or bitter, in Chiriguano, the whites call it lapacho.

CEIBA. -- A large tree with deformed trunk, and furnished with sharp points, broad leaves, and large, white flowers which produce a material similar to cotton without fibers, for which reason it is smoother and shinier; it is used for mattresses [122] [115] and pillows and candle wicks. The wood is spongy and not at all hard; from it are made troughs to hold water from year to year and in this way they are not soon damaged. Its ashes

/20 cont./ ITS ashes
[137] [824] [388] [757] are good for the manufacture of soap, the bark is an emetic. The whites call it toborochi and the Chiriguano "Samuú." There are several varieties and all of them are utilized to some degree or other.

CEIBO. -- This tree is smaller than the former, but its [322] [415] wood is much superior, very fibrous, and rather light in weight, being used to make troughs which are very durable since they neither split nor are eaten by wood borers. It is very pretty when [262] it blooms; the flowers are fiery red and good for salads. The Chiriguano call it "Suinandi."

DRAGO /dragon tree/. -- A tall tree, straight and quite thick; the wood is strong and useful. If an incision is made [757] in the tree, a very red resin comes out; its bark is the best for making the teeth hard and for curing scurvy. The gum called "dragon's blood" is extracted from this tree. The whites call it tipa and the Chiriguano "Güirapitiyu guasu."

ENEA /cattail/. -- An aquatic plant which abounds in certain ponds and pools formed by the water of rivers which flow away from the main stream; the Indians use it for roofing their houses, muleteers for packsaddles, and others for mats in the dwellings, on which they also have their bedding for sleeping. This is the totora or matara of the whites and the "Caipempe" of the Chiriguano.

[262] ESTORAQUE /storax/. -- This is a very large tree of the forest; it has whitish flowers and yellow fruit the size of a fig, which is edible and a favorite of parrots and monkeys; the Chiriguano eat it as a fruit and call it "Aguai."

GARGATEA or CARICA MAMAYA. -- This tree is not very abundant nor is it found in every section. It is of normal size, with a straight trunk and smooth bark softer than the fig tree; the wood is soft and is of no use at all, being similar to that [262] of the ceiba, or toborochi. Its leaves are like those of the fig [252] tree, and the fruit is of the /21/ same size and form, but yellow; it is edible and good when boiled or roasted. If eaten raw, it hurts the mouth. In Chiriguano it is called "Caincantina."

/21 cont./

137 824 [245] GUAYABO /guava/. -- This fruit-bearing tree is found wild and cultivated; it is of medium size, and the fruit, when ripe, is yellow on the outside and purple on the inside, and its bittersweet flavor is very pleasant and laxative. The green fruit and the roots are astringent; the Chiriguano know it by [262] the same name. The wood has no use at all, and even if it did, the Indians would not use it because it produces edible fruit. They regret it when any of these trees and others, like the algarrobo, are destroyed.

GÜEMBE. -- This plant thrives on the trunks of high trees, where it puts its root, and others which penetrate the ground [492] hang down from there. The roots and lianas are dark in color; very strong and durable halters are made from its bark; it is not found everywhere. One encounters it from the left bank of the Parapiti River; its fruit is similar to that of maize, for which reason it is called maize of the air, and it is edible.

HIGUERA AMERICANA /Amerigan fig/. -- This is the [262] guapoy of the Chiriguano and the bibosi of the populace; although the fruit is rather sour, it is edible. Bats like it, and it [757] is annoying to have this tree near the dwellings; it has a milky juice like the common fig tree, which, applied to wounds, [245] heals them. In addition to the above fig tree, there is the [439] common one which flourishes with very little care, in the towns, [431] especially the Mission ones, it is widely cultivated by the natives and its fruit is used by them for gifts and trade with the whites.

244 MANDIOCA. -- This plant is called "Mandio" or "Mandiporopi" by the Chiriguano Indians. A little book written by a Jesuit missionary of the old Paraguay missions relates that this plant was left to those Indians by Saint Thomas the Apostle who, according to their tradition, came here to preach the doctrine of the Redeemer. Mandioca is [252] an excellent food and very digestible; it is eaten boiled, [262] roasted, and fried in lard. It is a plant cultivated by whites and by Indians.

/21 cont./

137 824 [342] [352] [757] MARA or CAOBA /mahogany/. -- This tree is found in all sections. It is a strong wood, but the white part at the sides is subject to decay. It is rather heavy and hard and is only used for door and window casings and even for tables. The leaves are permanent, but not too good for shade. If the leaves are touched with some force in order to pick them, they cause a skin eruption which disappears only when treated with bees' honey; I cured myself this way twice.

137 /22/ MELOCOTÓN /peach tree/. -- This tree, native to Persia, is quite productive in this region, but its fruit, severely attacked by the black butterfly, does not reach maturity because it always has worms. The apple tree grows in high places and where the atmosphere is not so hot, but both of these are orchard trees, not native ones, having been imported by the whites, who cultivate them, which can also be said of the quince tree.

139 824 [757] [2073] MOLLE. -- This tree is not found in the central part of the region and thus is not native here, being obtained only by cultivation. The whites and the Missionaries have introduced it into the towns with good results. It is found in abundance in the district under the jurisdiction of Padilla; it has permanent leaves, which are medicinal, as is the resin which comes from the trunk; a cooling beverage, pleasant and similar to wine, except that its odor is somewhat disagreeable, is made from the seeds. [757] The eucalyptus is another tree which thrives regularly here, but it has also been imported; its leaves, also permanent, are very good medicine for the endemic fevers; its trunk is an excellent wood. Neither tree has a name in Chiriguano, from which it can be deduced that they have been imported, like the grape vine, the common fig tree, the peach, quince, etc.

MORA OR MORERA /mulberry/. -- This tree is found wild from the left bank of the Parapiti River in Cordillera Province. It rises to a height of some 15 meters, is bulky with a very leafy top, and the fruit is smaller than that of the cultivated mulberry; the wood is solid and compact like that of the soto and has even better qualities; it is used for machines for milling sugar cane, plantations of which are common from the banks of the Parapiti River, where sugar of the highest quality

/22 cont./

•139 824 is manufactured. On the slopes of the hills is also found the blackberry /zarzamora/, whose fruit is so pleasant to the palate, but whose thorn, which is like a cat's claw, is quite dangerous and barbed. The mulberry in Chiriguano is called "Tatayigua."

245 NARANJO /orange/. -- Neither the orange nor the lemon are native to the Chiriguano region, but they flourish greatly and grow to some height. Where it is easy to open irrigation ditches and possible to irrigate orange and lemon trees, they produce large, juicy fruit, the former being very sweet and the sourness of the latter being mild. The citron tree flourishes and is a plant imported here; its fruits are as big as gourds. The Chiriguano cultivate the orange tree here and there, but the whites cultivate it on a large scale; I know of some /23/ rather large orange groves, and they exist in nearly all the missions.

139 824 NOGAL. -- This tree of extraordinary height is only found wild; the leaves are very small and somewhat like those of the true nogal; the fruit is edible, but its shell is hard to crack. [258] The flavor and characteristics are the same as those of walnuts, so that oil, which is used instead of that from the olive, can be extracted from them. The wood is rather dark and good [322] for carpentry and cabinetwork, but it is inferior to that of the true nogal, which is found in the cultivated state where there [386] is sufficient moisture; a dark coffee-colored dye is prepared from the leaves, the bark of the trunk, or the roots, for dyeing wool, for staining other woods, and for printing ink.

NOPAL. -- This is the fruit-bearing plant which is most abundant in the region and which is found everywhere without any cultivation, for which reason it is most highly regarded by the Chiriguano, who is naturally lazy. But since it is sought [245] by the cattle, it is beginning to disappear or, more exactly, it is not found very much in the woods and clearings, but the Indian still cultivates it because it flourishes easily without need of irrigation and multiplies without the need of planting other shoots. It is convenient for the laziness of the Indian; the yellow flowers come out around each spathe and the fruit matures there as well; it is full of small seeds and sweet pulp, pleasant and refreshing. Some trees are covered with long

/23 cont./ some trees are covered with long sharp points and others are not, only having an occasional imperceptible sharp point; the fruit of both is pleasant and serves for gifts and trade for the Indian, who sells it to the whites, the ones who, rushing to get rich more quickly and easily, are little concerned about the nopal and the fig tree. In Chiriguano it is called "Ikini."

PALM or PALMER. -- The palm tree has congenial places, where immense forests are formed and sometimes grow all around a lake like a great garland; it is a very tall and smooth tree without a single branch. Its leaves are in the form of a fan and are used to make hats and for sieves, which are sold for 30 or 40 centavos apiece. The wood is good for joists in houses, and it is also split into shingles for roofs and is quite durable, if the precaution is taken of cutting them after the full moon. In Chiriguano it is called "Carandai," and the place which they occupy, "Carandaiti," palm grove.

PALMA CHRISTI. -- A not very durable plant, it grows to a height of four meters, has a soft, hollow trunk, large leaves, /24/ and flowers in the form of a bunch of grapes. The seeds are found inside little burrs, like chestnuts; said burrs in some plants open by themselves in the warmth of the sun, while others must be opened or carefully broken with a little hammer or a stone. The name indicates that it is a beautiful plant, but this beauty is in the broad, abundant persistate leaves. There are several types with reference to size and quality of seeds; I know five kinds. Castor oil is extracted from this plant or from its seeds for use as medicine; we use it in the missions to fuel the lamp of the Blessed Sacrament, and the Chiriguanos mix it with "Achiote" seeds and put the resulting cosmetic on their faces and on their calves down to the feet. In Chiriguano the plant is called "Ceniro," and the oil, "Yandi." Even the leaves of the Palma Christi are medicinal, some being hot and others cool; thus when headache is a result of overexposure to the sun, the leaves of the white spurge are applied; if, on the other hand, it is the result of high humidity, the leaves of the red spurge are applied. The seeds of the dark purple spurge are very small, but contain more oil than others.

[illegible]

/24 cont./

245 PAPAYO. -- This tree is neither native like the palma Christi, nor is it found wild like the latter. It is grown in orchards or in well-fenced fields, grows very fast, and produces fruit one year after being planted. Its trunk is straight, soft, and hollow; some have two or three branches and rise up to four meters high. The fruit is refreshing, yellow, with a smooth skin, of the size and shape of a small melon, even the flavor being somewhat similar, but it is more digestible. Many fruits are bunched around the trunk and are also found here and there at each leaf, but always attached to the trunk. The plants which produce the fruit are the good ones, and they call them "females." There are others which they call "males," but their fruits are useless and are not attached to the trunk, but rather hang from it like streamers. It is useless to pick them. To have a good papayo tree they assert that, in transplanting one, it is necesary to take the precaution of always putting or burying two plants in each hole, one of which will always be a female, and the one which turns out to be male will be pulled out. I do not know if this is true, but I did it this way in January of this year. The fruit contains many seeds which, [257] when ground and drunk in an emulsion, are good for getting rid of worms. The fruit and the tree have a resinous milk. [258] Therefore, in order for the fruit to be good and digestible, it is better to cut off the ends and make about five or six vertical cuts so that this resin may come out; by the next day /illustration appears here/ /25/ it is already very pleasant. It is nevertheless best to take the precaution of letting them begin to ripen on the plant itself; in this condition, uncut, they will last up to six days without going bad; then they can easily be transported great distances.

130 824 [252] [262] PASSION FLOWER. -- This is a climber which is found on fences, clothing them in the rainy season with abundant foliage, as does the "supua," whose fruit is edible and good roasted or boiled, as is the leaf. The fruit of the passion flower is of the size of an apple and just as smooth, the skin is thin and the inside is found to be covered with a white, stringy membrane. When this is broken, the seeds of the fruit come

[Text Continues on P. 43]

/25 cont./

•137 824 forth bittersweet and very good. These are ash-colored and pearly and very highly regarded by Chiriguano and whites. The blossom of the passion flower is purple, forming a garland like a crown of thorns: it has its calyx, five petals and three pistils, for which reason it is called passion flower, and it is certainly worthy of admiration. The Indians call it "Murucuya."

[177] PIÑON. -- A euphorbiaceous plant, this little tree exists in a cultivated state and was introduced into this Chiriguano region by the white Christians. It grows in orchards and elsewhere, and its maximum height is three meters. Its small [159] trunk is slender and top heavy, and its fruit consists of black seeds which are not edible but which, when ground and diluted in water, make a powerful purgative and therefore must be used with great care, because they can cause death.

137 SAUCE /willow/. -- It grows and develops on the banks and in the bed of torrents, as well as on the shores of streams, which shows that it seeks damp places, but from these places [342] the force of a flood often uproots it. The common willow has no special qualities; only its branches are useful in the building of houses because they are flexible, fibrous, and not heavy; little use is made of the trunk. It is a tall, large tree with very tiny leaves. In addition to the common willow there is also the weeping willow, whose branches touch the ground: it is neither native nor found wild; some whites plant it to beautify their interior patios. In Chiriguano the common willow is called "Iañirapuco."

SAUCO /elder/. -- It is not found everywhere, only being found along streams with little water which are in the wood. It grows to four meters in height, its trunk is slender and soft, its branches have a pith which is easily extracted, and its white flowers in the shape of a parasol are odorific. The whites do a good deal of searching for this flower /26/ for their illnesses. Even the leaves are medicinal; when drunk in a decoction they are a good purge. What a pity that it is found in such limited areas!

/26 cont./

137 824 SOTO. -- This gigantic tree is found everywhere from the province of Tomina, but there are places where it is more abundant. In the spring, when the budding begins, its leaves are red, and later they turn green. In the autumn its fruit, which the parrots like, are red and are in bunches like cherries. Seen from a distance by a European, he thinks they are cherries. The wood of the uko is strong and does not rot: in dampness or in water it is better than iron, since it does not deteriorate. [342] It is very widely used in the construction of houses, especially when they are of frame construction. A great deal of tannin, which the Europeans use in tanneries, is extracted from the bark. It is called palo cuchi by the whites here and "Urundel" by the Chiriguano.

249 TOBACCO. -- An annual plant which flourishes everywhere, but only the whites cultivate it on a large scale, especially in Saipirangui and Chiquiacá, whose products have some fame. Even an occasional Indian cultivates it for his own use and to give to his friends. There is another similar plant, and, when he lacks real tobacco, the Indian deceives himself with its leaves. The true tobacco is called "peemi" in Chiriguano, and the other "huacapeemi," which, literally explained, means "cow tobacco." In Bolivia there is considerable consumption 296 of tobacco wrapped in paper or maize husks; rarely does one see cigars of pure tobacco, like the Havanas and others; the Chiriguano smokes a lot and acquires the habit at a tender age. [897] Children of four years of age have already begun to smoke; [342] women also smoke.

139 824 [435] TACUARA. -- In the past when there were no cattle, the tacuara, or hollow cane, was very abundant; vestiges still remain of some immense canebrakes, but the plant has been reduced almost to the cultivated one, with the result that what was previously found in the forest at the disposal of the first occupant is found today in the possession of private parties, and anyone who is planning to build a dwelling must pay for hollow cane at the rate of 50 centavos per hundred,and the worst of it is that it is not found everywhere. This lack is made up for by small reeds from trees, but these are neither as light nor always

/36 cont./

137 824 as straight as cane. Beyond Santa Cruz there are still groves; in addition there are groves of another cane called "bambú," which is the best known, and in Chiriguano it is called "Tacuarembo." It rises to a height of about 15 meters and is [417] used for making /37/ ladders and scaffolding in construction 249 because it is light and strong. The shoots are tender and contain a sugary substance highly regarded by the Indians: it is not sought much today, because there are abundant plantings of sugar cane, which is of great utility for the production of sugar and alcohol. This last thrives with great ease and little work. Planting is done in two ways, making furrows and burying it or planting cuttings. The former is the better method where the freshets of the rivers do not penetrate. On the slopes and tops 137 824 of hills which contain water there is another sort of slender cane, very strong and heavy, which is not hollow like the other classes and is called caña brava by the whites, and [515] "Tacuarembo" by the Chiriguano. They use it for weavers' [513] reeds and for sleeping cots.

TAMARIND. -- This beautiful and useful tree is not native, but it thrives with enough care and grows to a respectable height; the fruit that it produces is abundant, consisting of abundant pods more or less the size of chick-pea pods; the pulp is blackish and pleasant to the taste, but it is bad for [159] the teeth. It is astringent and is administered as medicine for intestinal inflammations, especially to children. It is also [671] a good tonic drink on excessively hot days; it is prepared with sugar, water, and a little of its pulp. The tree is rather sensitive to cold, and the flowers wilt easily with the south wind. For this reason the whites plant it in their patios, which are surrounded by the living quarters.

TAGUAGUI. -- The name of this tree is Chiriguano. The tarigui is found in some regions, but not in others. It is of the cactus variety, rises up to six meters, its branchage is abundant and close, which gives a fine shade against the blazing rays of the sun. Its branches or leaves are striated and armed with spines; the fruit is tiny, but sweet and otherwise pleasant, and much liked by foxes, who only get it when it falls from the tree. The ajala or ajuntia is smaller than the tarigui, its leaves have the same form, the color is ash-gray and they are less a abundant, or, more properly, few. The fruit is a smooth berry

/77 cont./

which is purple when mature and opens into three sections when ripe. It has an insipid sweetness, but one which both whites and Chiriguano like. The color is a bright purple. It is abundant, and in certain years of scarcity it is a resource for human life in the months of February and March. In Chiriguano it is called "Iaraglina." The carapari is another cactus, taller than the preceding ones, which also has its congenial land. /78/ since it is not found everywhere. It is admirable for its tall, striated leaves or branches, ash-gray and armed with spines; its fruit is very pleasant and also sought by foxes. The trunk is soft like that of all cacti; nevertheless doors are made of this wood and are durable enough. The pulp of the trunk is used medicinally to cure liver ailments, etc. They say that it is even good for goiter. There is another species of cactus which grows to some 20 or 25 centimeters; it is round and thick, striated and armed with spines. In Chiriguano it is called "Zipapa." The children, as we shall see, make wheels by cutting off its spines, and, making it roll, they use it as targets for their arrows. Finally, there is another which is trailing and long, covering the ground where it grows and making the place impenetrable. This has and produces a very delicious fruit which is called "Tapiacaru" in Chiriguano.

TILANDSIA. -- This plant is known to the Chiriguano by the name of "Caraguata guasu." Its special place is the hills, and among them it has some more congenial to it; it grows well enough, and its leaves are extraordinarily broad and long and ash-gray in color; in the middle there is a thick stalk which rises quite high and is good wood for house rafters; from the crushed leaves they make cord and from these are made first-rate halters for tying up animals in the rainy season. The Tobas and even the Chiriguano make a kind of net which they call chiya or "ellapwa," which is very useful, inasmuch as the women can carry any weight in a bag of that kind; from the same they make nets so as to be able to fish in the rivers, and these are pieces of work which would attract attention in any part of the Old World.

/28 cont./

139 824 There is another small caraguata which invades wide areas [262] of land, preventing any animal from entering there, because it has spines on the bottoms of the leaves. In times of scarcity its root is food for the poor Chiriguano; the root contains a [283] little starch which has the taste of mandioca, but it requires great effort to pull it up. The leaf of this tilandsia is also good for making cord.

Finally, there is a third one which flourishes abundantly in trees and on the rocks of the hills, but which has no peculiar properties; it is large because of its leaves, which measure up to one meter in length. The plant is thick, the leaf fleshy, and it is used to decorate the streets with arches during processions. The aloe is similar to the second type of tilandsia, but aloe leaves are wide and thick, full of juice, while those of the tilandsia are slender, arched, and dry. The aloe is not abundant; only an occasional shrub or plant is found.

244 /29/ TOMATO. -- This plant which produces fruits so pleasant and useful to the culinary art flourishes exuberantly in these lands; the fruit from each plant is abundant and is produced the year round when some care is taken to protect the plant from the cold or from the light frosts which customarily [239] fall in June and July. To do this it suffices to pile up dry cow dung in two or three places in the tomato patch and set them [197] afire. True tomato plants are also found in the woods, but it is presumed that some bird must have carried the seed to such places; the tomato is a plant which has been brought into the Chiriguano country, as is the case with the onion, the sweet potato, and the cabbage.

222 In the woods there is a kind of tomato in the wild state which is somewhat similar in appearance and taste, but which is quite different from the true one; it is picked green and allowed to ripen in a room on top of a piece of wood; in a [244] few days it turns red, which is a sign that it is ripe. The chili pepper also produces abundantly and with little care; it is a plant which lasts up to three years if care is taken to prune it, and the second and third years the fruits are very hot. Another kind of small, round chili pepper abounds in the woods and bears spontaneously; it is called arivivi by the whites and "guli rai" by the Chiriguano. It is hot, and some cure sickness,

222 [959] /19 cont./ IT is hot, and some cure sickness, or inflammation of the eyes, with it. Nevertheless, one should not confuse this little plant with another similar one whose fruits lack flavor and which is called by the Chiriguano "Aguara quii," which is to say, literally, 'chili pepper, of the fox.' The best way not to confuse it is to taste the fruit; it is found everywhere.

243 TRIGO /wheat/. -- The Eternal Creator of all things in his bounty and mercy arranged that this small plant, necessary in every aspect, should yield its fruit in every region inhabited by man; thus, in spite of the excessive heat, it is harvested here in abundance, and the farmer is not robbed of his hopes if he takes care to irrigate the field opportunely. Barley also flourishes in irrigated lands, but the cultivation of both has been abandoned for reasons already expounded in these pages and also because birds greatly bother both crops, as also happens in the rice paddies, which will be found empty if they are left to the discretion of our flying friends.

[824] [412] There also thrives together with maize, or in other places, the wheat called Guinea, or sweet sorghum, which the Chiriguano call "Tricu" and which is indigenous: it is sweet, matures with maize, and they suck it, as well as the panicled sorghum, which is a kind of sorghum /JO/ without sweetness and used for making brooms for sweeping. The seed of both plants is liked by birds.

● 139 824 [262] VID /grapevine/. -- Further on I have said that this plant pre-eminently required for the Sacrifice, like wheat, thrives quite vigorously in this region. I add here that in the woods there is a tree with small leaves and unimportant wood, which rises up to some eight meters above the ground and whose fruit is the size of an olive, has a dark coffee color and a flavor like that of the grape, matures in the month of February, is edible, and is called "Ivaviyu" in Chiriguano. Also in the wild state is the native grape with its twining trunk. Its fruits are like a bunch of grapes: they are white and some even black, and they are good for the manufacture of brandy.

/20 cont./

137 824 27C YERBA DEL DIABLO. -- This is the datura which is so abundant in the countryside and fields and which is a real plague. It rises to one meter in height, has branches, broad leaves, white flowers, and fruit armed with spines which, when dry, are enough to draw blood. The leaves and seeds make one lose one's memory. In this respect I remember one incident when an Indian woman absent-mindedly or out of ignorance covered an olla of hot food with datura leaves; half an hour later she ate it and it gave her a bad headache and a short spell of vertigo. Her little granddaughter, a schoolgirl about six years old, ate some also, and she suffered a complete loss of memory and all her actions were those of a demented person, a state which lasted some 24 hours. It seems that the Chiriguano [159] do not know that this plant and its seeds and leaves are poisonous: the latter, dried, are medicinal, alleviate the effects of asthma, and are prescribed for asthmatic Indians. Christians know it by the name of chamico, and the Indians by that of "caani," that is, painful herb.

137 824 SAPALLO /squash/. -- There are eleven species of this creeping plant, which I shall discuss in another chapter, only adding that watermelon and melon also grow here, as well as the cucumber and the beet. The "curugua" and the "curuguami" [242] of the Chiriguano are plants which are similar to the sapallo, but they climb trees and produce there an oblong, sweet, and fragrant fruit; when one enters a house, it is immediately evident if there are curugua fruits there; they are edible both green and ripe, but they are preferable in the ripe state.

[342] I shall forgo describing many trees and plants whose medicinal virtues are known; I shall take up others when dealing with medicines; however, below I forget it. I shall note here at the end of the flora that a region where /21/ there are damp places abounds in secular cedars, whose wood is used in carpentry for doors, windows, tables, etc. So that it may not be subject to rot, it is necessary to get mature plants whose color is light red; the whitish one is attacked by the wood borer; the odor of the wood is narcotic, and this property keeps away insects; its odor is similar to that of the cedar of Lebanon, and for this reason the conquistadors gave the name of cedar to this tree which the Chiriguano call "igüirare," or stinking stick.

4: Nino--85 M-3 (1893-1911) 1912 SF10 Chiriquano SF10

Small grove of palmettos in front of the house of Mans Ichaso. -- Salinas.

/87 cont./

797 the climate is very healthy. but the lack of food is continual. and they must often eat the roots of the serpentine arum. or mangara. bitter and poisonous before it is cooked (?).

2. Flora Cruceña of R. Peña. The fire makes it lose the poisonous part. but not all of the bitterness.

The buildings are constructed on a level site located on a small rise. The panorama which runs from north to northeast is [133] extensive and pleasant; there in the distance can be seen the hills of Taremacua and the cordillera of Ururigua. through which Nature opened a gateway to give passage to the waters of the Parapiti River. which fearlessly and with great boldness hurls itself from a great height. forming by its imposing waterfall a lake of white foam. like a boll of wild cotton. and then following its rapid course through San Antonio. Mariqui. Cumbarúi. and Isoso. /88/ where it is completely lost. Still farther beyond. to the north and northwest. in the midst of a thick forest of quebrachos. [137] [133] thickets. and secular algarrobas. are seen the tops of the ranges of Salinas and Timboirenta and something of Incahuasi. and at a short distance from the town is seen a round hill called "Tunpa repoti." the Chiriguano history and meaning of which I am not ignorant. and in front of the mission house. at the distance of half a league. are the pampas of Curuyuqui located among algarrobas and other trees; up to here the panorama of Yvu is similar to that of green Umbria of the kingdom of Italy. The [137] picture is dismal to the west and south. because the heart is oppressed by a consideration of the sands of the desert. however. much the springs of the west suggest the ancient and capricious fountains of the temples of Arcadia. Nevertheless. in the rainy season the hills and the plains garb themselves with fresh grass and wild flowers. lending to the nearby horizon a pleasant and varied appearance. The town is located at 770 meters above sea level. and at 20° 44' 35" south latitude. and 65° 50' 7" longitude west of the meridian of Paris. according to what is recorded in the

/172 cont./

342 824 The hardest part is finished with the previous operation; a short rest is taken, and then the owner of the new building must obtain enough hollow cane, engaging for this purpose Indians who have horses. But if the cane is very far away and has owners to boot, he gathers long sticks of astringent acacia or sebil and puts them horizontally every 15 centimeters on top of the rafters with the same above-mentioned lianas. Some [283] people, to tie the cane or sticks, use thin cords made from cowhide, but this, in addition to being more expensive, is less durable than bejuco (1).

[137] [178] [423]

1. Before the whites settled in Chiriguano country, hollow cane was abundant and had no owners; at the present time it cannot be found, and, if there is any, it is in private hands and must be bought.

Generally, before the walls are begun the house is covered with capíi, red straw, or, should this not be available, with capiáncua, straw for harnesses of beasts of burden, which is of inferior quality and very soon frays to pieces with the rain, sun, and strong winds, while the capíi may last for more than ten years.

[476] If it can be obtained by staying for a few days in a place where it is plentiful, he pulls it up there and reduces it to rather large handfuls; the gathering is done in several days, engaging Indians who own horses. When the material is in the town, he rests for a few days or weeks; he informs or invites those who wish to take part, in particular those who are closest to him by [354] kinship or friendship. These then go about tying the capíi between two horizontal canes toward the side of the roots, forming long, narrow lines, and when they are so placed, they attach them horizontally, beginning at the bottom and working /173/ upward or toward the ridgepole, where they leave a large vent to let out the eternal smoke of their inextinguishable fires (1).

1. Now the red straw is disappearing almost completely; the destruction of this necessary

/193 cont./

302 137 824 Another of the cosmetics frequently used by men and women is the Carasapa. This is an annual plant with broad leaves, and its stem grows /194/ to the height of a meter or a little more. The color of the plant itself and of its leaves is, for about half of it, somewhere between red and purple. The flower is large and about 30 centimeters long, its color being the same as that of the plant, but much brighter. There is enough of the plant everywhere, but it is not very abundant. The flower is somewhat heavy when it has seeds, and since the stem is slender and flexible, the result is that when it cannot hold itself upright it leans over toward the ground, forming an arch, hence its name Carasapa, or arched plant (1).

[529] 1. At carnival time even the neophytes paint their faces, as do the whites. They buy face paint which the whites sell, and the infidels forsake their achiote at the carnivals.

303 When the flower and seed are in season, the coquettes do their harvesting in order to use it, and they look pretty. The Carasapa also has its preparation, without which its application would not be easy. They first grind up some white beans, sift this meal very fine, and then grind the Carasapa in a mortar with a little water, put this mixture in a cloth, squeeze over the bean meal the water which comes out, washing or coloring it, and then dry the dough in the sun, spread out on a cloth or a Cutama. The preparation is not difficult, but not all of them go to the trouble to do it, and for those who prepare it, it is a profitable item.

302 [531] The way to use it is the same as for the achiote, but it does not have any peculiarity, and hence it is only used at fiestas and at carnival time. Maidens beautify their faces by forming two circles of carasapa on their fresh cheeks and paint their eyebrows with achiote. Formerly, when young girls wore the Atira, pompadour /copete/, at fiestas it was painted with the carasapa mixture, after having been oiled with palma Christi.

/253 cont./

261 262 feed themselves with: algarroba pod, Hibope; chañar /a legume/, Cumbaru; mistol /a fruit/, Yua; tuna, Hibopone; sour algarroba, Hibope tayi; nopal fruit, Saini; or from the fig, iva; the higuerilla /little fig/, Caicamina, the thistle /cardo/, Tapiacaru, and the chala /a kind of cactus/, Nancagüira (1).

[137] [132]

1. The fruits mentioned and many others are plentiful in the whole area but in the Ivo region they are more plentiful; the years have now greatly changed: it does not rain as regularly as in times past and the crops are somewhat certain only at the foot of the mountain ranges.

181 Indubitably the Chiriguano, although superior to other nomadic tribes that surround them or border them, are very unfortunate and poor, but, on the other hand, their life is peaceful, they bother no one, and they do not wish to be bothered. When the Chiriguano Indian has food, he is the happiest being on earth; his savage bliss can today be envied by all the rulers and great of the world who live without knowing whether or not they will wake up on the morrow, in view of being surrounded by so many anarchistic dangers, so many bombs and dynamite that the obscure sects make explode, so many excesses that occur and are reported in the newspapers, and so many deaths that are taking place. Oh, this kind of savagery has not penetrated among these savages! That is why they sleep peacefully without fear, in the town, in the countryside, and in the forest, and they are happier than others; those who seek bliss on this earth may well envy these Indians.

Schmidt-Schiffel I-4,6 (1908-1909, 1913) 1950
SF13 Chiriguano SF13
Chaco SF4

IV.

Hunting Equipment.

The Chiriguano and the Chané are not keen huntsmen. They are rarely seen out hunting. Their hunting-weapons are the bow and arrow, the pellet-bow, clubs, slings, and snares, all of their own manufacture. The Chiriguano have bird-nets too, and formerly they had the bola as well. The Chiriguano and the Chané have no weapons exclusively used in warfare. Formerly they had lances[1].

The bow and arrow are going quite out of use among these Indians except for fishing and as a weapon for boys. The degenerate type of bow now seen among the Chané and Chiriguano is certainly not original. According to Lozano[2] the Chiriguano used to have bows of a man's height. It is of great interest to learn from Lozano that the Chiriguano used to protect their left wrist with a small piece of wood to prevent the skin being grazed by the bow-string. Something similar occurs among the Ashluslay (see Part I. P. 40).

Their arrows are very like those used by the Chorotí and Ashluslay. The arrow shafts are of the same kind of reed[3]. At the Río Parapití this plant, which grows abundantly beside the Río Pilcomayo is cultivated by the Indians. On the Río Parapití there is a place called Ouivaremda, which means »where there is chuchio.« This plant, the *Gynerium* sp. whose seed-stalks so many Indian tribes use

[1] Cascudo P. 331.

[2] P. 308. »Usaban demasiados y quando usaban qual ó qual tiene una cuatrevilla hasta el codillejo; . . . son grandes flecheros, sus armas son arco y flecha; el arco tan grande como el mismo que lo tira, y porque la cuerda no lastime la mano izquierda, en la muñeca enrajan un trocillo de madera y allí da la cuerda.«

[3] *Arundo donax.*

[4] [Errata: this should read "See Summary p. Chaco P. 2028".
(4 errata sheet, Col. 116, Rivet -- Analyst.]

5:Nordenskiöld E-4;1(1908-1909, 1913) 1920
SF10 Chiriguano SF10
Chané SF8

Rio Paraguay after Garcias marauding expedition, not far from the tract where the Guató now live.

A potspade of the same type from the Yulãmana along the Rio Querarý is shown in an illustration by KOCH-GRÜNBERG.[1]) I have not seen the shoulderblade potspade in any other tribe.

Similar spades, said to have been used for agricultural purposes, are mentioned by ST. CRICQ[2]) from the Conibo.

Nowadays the Chiriguano and Chané for the most part eat their food with metal spoons which they have got from the Whites. They have, however, wooden spoons as well. They generally eat from earthenware bowls of their own make. They seldom have wooden bowls. I have already treated of the distribution of the wooden bowl and the wooden spoon. (Part 1 map 12 and 13.) They are features of western civilization. Calabash bowls are universally used by the Chiriguano and Chané as drinking vessels, particularly for chicha.

Silver bowls — »Cagua» — are occasionally seen at the Chiriguano festivals. These bowls, which are shaped like cloven calabashes, are often furnished with small ears and are made by mestizo smiths to suit the Indian taste.

There is in my collection a calabash bowl that has been turned into a ladle by means of a handle. It is from the Chané at the Rio Itiyuro. I have also procured some bowls made of the fruit of the calabash tree from the Chiriguano. The Indians get them from Stª Cruz de la Sierra, for, as far as I know, the calabash-tree is not cultivated within their own area.

Fire-fans of plaited palm leaves are used, though they are rather uncommon. These fire-fans belong to the cultural elements which have come to the Chiriguano and the Chané from the north and east. Later on, when writing about the Indians in northeastern Bolivia, who have sev-

[1]) T. 2. P. 209.
[2]) P. 287

S:Nordenskiöld E-5,4 (1908-1909. 1913) 1920
SF10 Chiriguano SF10
Chaco SF8

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171

eral different kinds of palm leaf fans, I will deal with them in detail.

At present I can refer to what Pater Schmidt[1]) has written about the geographical distribution of fire fans of pla'ted palm leafs in S. America.

C
442

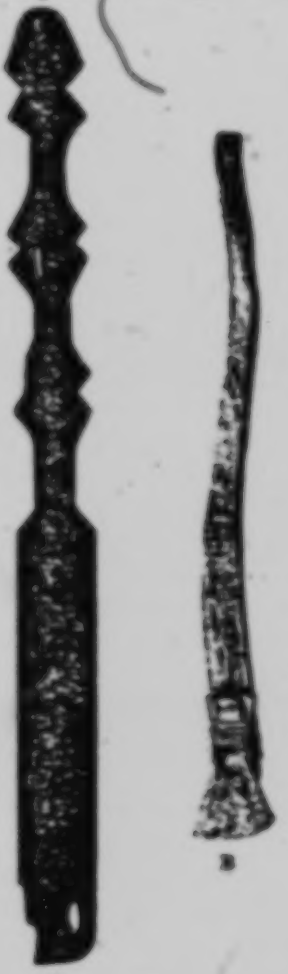

Fig. 17. Fotopados. Chiriguano.

A from Tiköpa. 1/9 R.M. E. 595.
B from Caipipendi. 1/9 R. M. E. 590.

[1]) P. 208.

6 Nordenskiold - S F 5 (1908-1909) 1912 SF10 Chiriguano SF10

/152 cont./

earrings with real "diamonds," rings with "sapphires," or other fine things, which she could then show off at the next drinking bout.

There are always two villages in these mission stations, one for the heathens, one for the Christians. I myself always felt more comfortable in the former, and this not only because more fine, old things were to be collected there, but also because the people there were friendlier, more tactful, and more polite in their behavior. The mission children were importunate and impudent.

Near Machareti there is a large basin-shaped valley through which flows a little brook that probably swells to a roaring river after a violent tropical rain and disappears in the wilderness of the Chaco. Quite near the mission it leaves the handsomely dissected mountains, where small petroleum springs trickle out everywhere in the crevices of the cliffs. Then it flows through a hilly landscape that gradually turns into the vast flat area of the Chaco. The vegetation in these regions is not very luxuriant. The woodland, when such is present, is sparse, low, shrubby, and monotonous. The fields seem to produce abundant harvests, the drought seldom too long. These regions are often devastated by huge swarms of locusts. I have seen these destructive animals cover the woodland like large, reddish-brown clouds.

From Machareti we went by way of Itatiqui, a very interesting Chiriguano village in an arid region, to the Rio Parapiti.

The latter comes from Pomabamba and Sauzes, from the /153/ mountains of the Quichua /Quechua/ Indians. After it has left these, in the rainy season, it is a roaring stream overflowing its banks. In the dry season it carries little water. The Rio Parapiti also ends in the Chaco. During the rainy season it is lost in the swamps; in the dry season it disappears in the fine sand. If the Rio Parapiti parades on the maps, as the southernmost tributary of the Amazon River, this is only empty boasting on its part. The woodlands along the Rio Parapiti consist mostly of bushes and low, fine-leaved trees, caraguata, and cacti.

6: Nordenskiöld--6 E-5 (1908-1909) 1912 SF10 Chiriguano SF 10
Chané SF 8

/155 cont./

Pilcomayo and finally unites with the Río Mamoré. A few Chiriguano live along this river, and savage Tsiroloa and Sirionó also rove about in the forests along it.

Between the Río Grande and the Río Parapití there is a region with an extreme scarcity of water and largely covered with completely impenetrable underbrush and low scrub forest full of caraguata and cacti. This monotonous, dismal vegetation is interrupted here and there by hills and grassy plains.

Besides the savage Tsiroloa Indians who make these thickets unsafe, one finds another curiosity here, namely the guanaco (Auchenia). It is altogether strange to find an animal like the guanaco, which one thinks of only in connection with the cold plateaus of the Andes or the /156/ pampas of Patagonia, often afflicted with frost, in this bush which is frequently scorched by droughts. It would be interesting to be able to determine whether this guanaco of the tropical forest is really the same as the one known from the colder regions. Intelligent whites with whom I have discussed this and who have seen both regard them, however, as the same species.

Having returned to the Río Parapití, I looked up Botiráyu, with whom I had already become intimately acquainted in 1908 and who also speaks excellent Spanish.

With no other Indians with whom I became acquainted did I become as close as with Botiráyu. He understood that I was collecting the old mementos out of an interest in his tribe. Botiráyu did his best to explain to me the religious conceptions of his tribe. In the evening we used to sit in his room with a cigarette, and he told about olden times, sorcerers, chiefs, and spirits. Occasionally an old chief, Béyra, also came, and from him I heard many charming Chané legends. We would sit until far into the night and chat by a flickering light that I had with me in order to take notes.

One would be very much mistaken if he were to believe that the conversations with these men were merely an interesting study. I felt comfortable with these fine, tactful, yes, why not, cultured human beings. It was genuinely refreshing after coming from the often vulgar, empty whites.

/119 cont./
In the village of Cuevo alone 60 out of 200 persons died within a short time. I visited the Ind. They were as gay as ever. Spirits and beer were consumed in quantities.

Father Bernardino was never given credit for this work, but rather the medicine men, who had bewitched the sickness so that it would not come to Ivo. The white colonists, too, occasionally had the medicine men come in order to /Fig. 78 appears here/ drive away the sickness. They did not believe in the vaccine either.

With Ivo as the starting point, I made a trip into the

Fig. 77. Clay vessel made by the wife of the Chiriguano chief Mariagoy. 1/6.

Iguembe valley, in order to visit the Chiriguano chief Mariagoy. It was a charming ride on horseback up on the high crests and down into deep valleys, through an often grandiose, colorful landscape. These valleys are poor in forests. Only in a well-protected ravine in which a brook trickles forth is the vegetation luxuriant.

I soon became very good friends with old Mariagoy. The old man was conservative, clung to the old customs, and felt that the Indians should be on good terms with the whites, but should preserve their old habits and customs unchanged. His village was extraordinarily interesting and very rich in old, fine things.

6. Handschrift—12 E-5 (1908-1909) 1912 SF10 Chiriguano SF10

/119 cont./

things. The ceramics /160/ which I found there belong among the very best that I saw among these Indians (Figs. 77 and 78).

From Maringay I returned to Ivu by way of the mission station of Santa Rosa. It has a wonderful location. Like an old fortress, it is built on a narrow hill. Below it, in long rows, lie the grayish-brown Chiriguano huts surrounded by low woods of [84] [342] [137] ● algarrobas, cardi, small algorrobas, and other fine-leaved trees. This woodland is seldom so dense than one cannot easily get out of it without a bush knife. When I was in Santa Rosa,

Fig. 78. Clay vessel made by the wife of the Chiriguano chief Maringay. 1/7.

it was the dry season and everything was burned up. Here too, however, rain probably entices the green out of the dry earth. Sometimes the rain is so long in coming, however, that the [73] Indians do not get any maize and that means -- hunger.

From Santa Rosa one looks far out over the mountains and across the green plain of Boyuovis, over the country that was the native land of the Chiriguano, where, at Curuyuqui, they fought their last battle with the Christians, who assume the right to rob all weaker peoples.

After my excursion to Maringay I left the land of the Chiriguano and Chané and paid my second visit, already described in this book, to the Choroti and Ashluslay.

6: Nordenskiöld--24 E-6 (1908-1909) 1912 SF10 Chiriguano SF10 ●
Chane SF 8

/171 cont./
on the Río Parapití make raids on the Tekeluc Indians. The Ashluslay also maintain, as my interpreter told me, that /172/ the Toba chief Teycolique, during his invasion of their territory in 1909, had several Chiriguano with him.

Batiroyu said that in former times the Chané brought home the heads of their slain enemies and set them up on the plazas of the villages during festivals.

Fig. 82. Clay vessel of the Chané. 1/4.
Río Parapití.

/172/ Chapter Eleven

From the Land of the Chané and Chiriguano Indians

Everyday Life in the Chané and Chiriguano Huts

As a rule, I felt very comfortable in the huts of the Chané and Chiriguano. The life in these villages is exactly the same. If one describes one village, he has described almost all of them.

Like all the other Indians whom I visited south of Santa Cruz de la Sierra in Bolivia, these Indians live in villages. Some of these villages are quite large and inhabited by several hundred persons. Often many villages lie close together. The huts, as a rule, lie around a market place on which sweetsop trees are occasionally planted for shelter in the rainy season. The market places serve as playgrounds and meeting places. The huts, in contrast to the round Choroti and Ashluslay huts, are square, and their doors, facing the village, are set in the gable. They are made of cane or wooden slats, with roofs of grass. Not infrequently they are plastered with earth.

6: Nordenskiöld--35 E-5 (1909-1909) 1912 5910 Chiriguano SF10
Chane SF8

/181 cont./

Branches of Subsistence

Fishing and hunting do not play an important role among the Chané and Chiriguano. As I have mentioned before, they are farmers, primarily maize farmers. These Indians live so exclusively on maize that for them all other food plays a subordinate role. The Indians living on the Río Parapití are an exception; they plant more sweet potatoes than maize, and these yield an excellent harvest in their country.

/182/ The following plants are grown by the Chané and Chiriguano:

Sweet potatoes.
Maize.
Squash (Cucurbita pepo Lin.).
Calabash fruits.
Beans of different varieties.
Cotton.
Urucú.
Tobacco.
Tuna (for example, at Yatavéri). Opuntia.
Millet.
Mandioca (rare).
Reed for arrow shafts (on the Río Parapití).

In the plantings of these Indians I saw neither ordinary potatoes nor bananas. The sweet potatoes, according to Retizeyu's statements, were introduced at a late period by the whites. Tobacco-raising is insignificant. The Chané and Chiriguano are not great smokers. They mostly smoke cigarettes in maize leaves, seldom pipes (Fig. 88). Among them one need not give his pipe to a neighbor for further smoking.

It is strange how the use of tobacco differs among the Indian tribes. The Aymara and Quichua /Quechua/, who chew coca, very seldom smoke. They have no taste for it. The Chacobo and Atsahuaca, two tribes with whom I became acquainted on my travels, smoked just as little. When I offered a Chacobo a cigar

In Smithsonian--61 E-5 (1910-1918) 1912 SP10 Chinigueno SP10

Plate 17. Palm forest not far from the Rio Pilcomayo

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When the girl reached home, a bird, "kraque" /grow/, cried that she was pregnant. The next day she grew big. She was in an advanced state of pregnancy. Her mother was provided. She said she wanted to go far away to the father and give birth. Inkosu went to the cave of Tatutunpa and dropped the child in it, without giving it milk. The child grew daily, and the mother looked after it, but when she came, it crawled into the cave. One day "Tatuuke" came, the jaguar with two hands, one of which was dry, and bit her eyes out, and led her away alive.

The grandfather now went out to catch little Tatutunpa by placing in front of the cave a net, in which he was caught. He led him home. There he grew rapidly and began to become big. He was brought up on honey. One day little Tatutunpa demanded bow and arrow. His grandfather made him an arrow with a blunt point of wax. With that he went out and hunted. When he hit the trunk, all the pigeons fell down dead. There was a great quantity. When Tatutunpa came home, his grandfather asked him how he was able to kill so many pigeons, and then he told how it happened. In the same way he killed many birds. One day he saw five kraque birds on a tree. Tatutunpa shot at the tree, but only four fell down. The fifth said: "You would do better to look for your mother than to shoot birds."

When Tatutunpa reached home, he asked his grandfather to make him a club out of "huiroguru" (1). He hit it against a

•/137] 1. Huiroguru is a soft wood (Salix Humboldtiana).

thick tree trunk, but was obliged to hit twice in order to get the trunk off. Tatutunpa told his grandfather it was worthless and demanded a club made of "urundey" (2). He hit it against a thick

2. "Urundey" is red quebracho or something similar.

tree trunk and struck off the trunk with one blow. "This one is good," said Tatutunpa.

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The Chiriguano inhabit the part of the Andean region, bordering on the Chaco, that roughly extends from the 18th to the 22nd degree of S. latitude. Within this region there is also found another tribe, viz., the Chané. These two tribes do not occupy each a territory of its own, but Chiriguano as well as Chané villages are found throughout the whole district thus jointly inhabited by them. No enmity exists nowadays between these culturally allied tribes. After the last great Indian rebellion against the whites (in 1892), a small portion of the Chiriguano tribe moved away into the interior of Gran Chaco, where it is believed that they are still remaining.

The western Chiriguano country, in which part the majority of the tribe is living, consists mainly of partly forest-clad mountain ranges, flanking wooded (fig. 18) or grass-grown valleys and small plains. It is a poorly watered country, but it mostly gives good crops, particularly gourd plants and maize. The climate is tropical, but in the higher parts the heat is not especially trying, except during the hottest season.

Although the Chiriguano and the Chané are on much the same level of material culture, they do not, however, belong to the same racial group, the Chiriguano being counted with the Guarani-group, whilst the Chané are Arawak. The Chiriguano, according to Matienzo, took possession of their present country in the beginning of the 16th century, when a portion of the original inhabitants emigrated and settled in the Tarija valley.[1] Possibly the subjugated Indians belonged to the Chané tribe. In later times this tribe has adopted the language of the Chiriguano, which is Guarani. Whence the Chiriguano originally came is not known, but it may be taken as probable that, formerly, this tribe inhabited the lower reaches of Rio Pilcomayo.[2] The name of Chiriguano (quichua), which means »dirt people« was given them by the vainglorious Incas, who despised the Chiriguano people, affecting to look upon them as barbarians. The word »guano« is the name for the well-known bird manure-found on the coast of Peru and Chile. It seems however unfair indeed that the Chiriguano, who, in contradistinction to the Puna and Chaco Indians, are scrupulously cleanly, should suffer from such a misleading and discreditable tribal name.

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[1] de Matienzo (1), p. 130. Nordenskiöld I (14).
[2] Nordenskiöld (14), p. 130.

7:Roses E-5 (1901-1902) 1924 SF10 Chiriguano SF10

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Fig. 187. Stream flowing through primeval forest. On the branches of the acacia in the middle distance there can be seen an epiphytic plant (Tillandsia usneoides) and rows of Bromeliaceae. District of San Luis. Bolivia. Phot. E. v. R.